REMARKS / ARGUMENTS

The Examiner's "Response to Arguments" has been fully considered, and amendments to the claims have been made accordingly so as to overcome and/or render moot.

The Examiner asserts that "the master and slave computers of Jain are vision processors due to their image processing, and the master computer is easily seen to be the user interface for controlling vision processors". However, it is clear from Fig. 15 of Jain that the Master computer of Jain is NOT a vision processor, since Jain clearly shows that image processing is done at the work stations, e.g., the image processing workstations of CAMERA 3 and CAMERA 4. The Master computer is merely a "CENTRAL GRAPHICS AND VISUALIZATION STATION". Further, Jain states that: "frame capture was done close to the camera on separate computers. For modularity and real-time video processing, it is very important that the video be independently processed close to the sources thereof" (col. 31, lines 20-24). Thus, the Master computer of Jain is NOT a vision processor.

If we assume that the Master computer of Jain is comparable to the UI computer of Applicant's invention, and then compare the Slave computers of Jain to the VPs of Applicant's invention, it's clear that the Slave computers cannot perform the functions of the VPs of Applicant's invention. For example, Fig. 4

shows a user interface on the Master computer, wherein a "viewer can choose any camera". (col. 22, line 7) The Examiner has compared the list of cameras in Fig. 4 to the "link functions" of Applicant. Thus, the Examiner is asserting that the Master computer, i.e., the UI of Jain, has link functions. By contrast, in Applicant's invention, a first VP has a link function, the first VP being on a first VP computing platform, the link function being a control function executable by the first VP. Further, the link function is NOT executed by the UI. The link function of the first VP is both for (1) **enabling a user to configure any second VP** using the at least one UI, and for (2) **establishing communication between the any second VP of the plurality of VPs and the at least one UI** on the UI computing platform, the any second VP being on a second VP computing platform, as now claimed in amended claim 1, and claimed similarly in amended independent claims 20, 26, and 30.

Thus, Jain fails to teach many aspects of amended claim 1. Jain is silent on the link function of the first VP being for **enabling a user to configure any second VP.** In fact, the Slaves of Jain do not have anything resembling a link function. The Master computer is not a VP, as established above. Jain is also silent on the link function of the first VP also being for **establishing communication between the any second VP of the plurality of VPs and the at least one UI.** This is also clearly true, since no Slave computer of Jain has a link function. Even the links that appear to be on the UI of the Master computer

of Jain do not have these aspects of Applicants "link functions", as set forth in the amended claims.

As to the Examiner's argument that "a continually updated image display" states nothing about (1) the volume of information transferred, or (2) the level on which the central and remote computers communicate", claim 1 clearly states that "the communication enabling a continually updated image display on the at least one UI representing a current state of the any second VP". One of average skill in the art of Machine Vision knows that a vision camera can carry either a live or a still image. Changing either a live or a still image from a vision camera involves transfer of image data, as one of average skill in the art of Machine vision surely knows.

Image data is more voluminous than symbolic data ... this is recognized by Jain at col. 31, lines 42-46: "The central master computer and the remote slave computers communicate at a high symbolic level; minimal image information is exchanged. Hence only a very low network bandwidth is required for master-slave communication." By contrast, since the UI and any second VP "exchange" image data, Jain teaches away from Applicant's invention. Neither Applicant nor Jain teaches any form of reversible image compression prior to image transmission, or subsequent image reconstruction. Therefore, "a continually updated image display" states something about the volume of information transferred". It also states something about the level ... images are

transmitted, in addition to commands. By contrast, images are NOT transmitted in Jain, only symbols, as stated by Jain at col. 31, lines 42-46.

The Examiner states that "the ability of the master computer to initiate communication between itself and a slave computer denotes a link function establishing connection between the first VP and a second VP". However, since the Master computer is NOT a VP, as established above, no link function is denoted by Jain.

The Examiner has stated that "the argued ability of any VP to control any other VP is never expressly claimed. This is now more clearly claimed in the amended claims due to the amendments made herein.

The Examiner has stated "a user interface need not be a computer unto itself, and such a computer is not claimed." Accordingly, Applicant has amended the claims such that now the UI resides on a "computer unto itself".

The Examiner contends that the terminology "master" and "slave" used to describe the computers of Jain does not detract from the fact that they may be used for "at least processing and interpreting images", and therefore act as vision processors". Applicant asserts that Jain clearly states that "frame capture was done close to the camera on separate computers (slave computers). For modularity and real-time processing, it is very important that the video be independently processed close to the sources thereof." col. 31, lines 20-24 Also, "whenever a frame from a specific camera needs to be processed then the master computer sends a request to that particular slave computer with

information about processing the frame focus of attention windows, frame specific threshold and other parameters, current and expected locations and identifications of moving objects etc., " col. 32, lines 3-8 And, "the processing of individual video streams is done using independent video processing slaves, possibly running on several different machines. The synchronization and coordination of these slaves, any required resolution of inconsistencies, and generation of expectations is done at the master". col. 32, lines 53-59. Thus, Jain is silent on the Master doing any image processing, assigning all such activity explicitly to the Slaves. Thus, the Master does NOT act as a vision processor (VP).

Applicant has amended claim 1 in a variety of ways, each amendment being independently sufficient to distinguish over Jain. Accordingly, the rejection of claim 1 in view of Jain is deemed to be overcome, for the reasons set forth above, as well as for reasons set forth in the response to the previous Office Action.

Regarding claim 2, Jain does not teach a VP control function, because the only alleged examples of control functions taught by Jain are shown on the "user interface camera list" display of the Master computer in Fig. 4, where the control functions only include the identifier of a plurality of first VPs, i.e., "slave" computers each with a camera, but no second VPs. There are no second VPs because the control function resides on the Master computer, which is NOT a

VP, and each slave VP references only the Master UI, and cannot reference **other** slave VPs. Thus, there are **no second VPs** taught in Jain.

Also by contrast, the first element of claim 1 clearly states that "the link function [is] a control function executable by the first VP". Only the Slaves of Jain are VPs, but they do not execute any control functions; the control functions referred to by the Examiner reside on the Master. For example, see Fig. 8 of Applicant's specification, where a first VP initiates a command 82 to the UI. This command 82 includes an identifier of the second VP. The first VP disconnects 83 from the UI. Then, using the identifier, the UI connects 83 to the second VP. This behavior is NOT taught by Jain, but is taught and claimed by Applicant. See claims 2 and 16, for example.

Further, the link functions of Jain on the Master UI of Fig. 4 do NOT include "an identifier of the second VP", as required by claim 2.

Regarding Examiner's assertion that clicking on an entry in the "camera list" activates a "link function", the link function of Applicant's invention as now claimed relates to a dual function: "the link function being both for enabling a user to configure any second VP using the at least one UI, and for establishing communication between a the any second VP of the plurality of VPs and the at least one UI". This link function is now claimed in all independent claims. Thus, the link function of Jain is NOT the same as the link function taught and claimed by Applicant. For any and all these reason, claim 2 is deemed to be allowable.

Regarding claim 3, this claim depends from claim 1, deemed to be allowable, so claim 3 is deemed to be allowable.

Regarding claim 4, the Examiner asserts that Jain teaches selecting a camera in the user interface of the Master computer is to open communication from one vision processor to a second. This is NOT true, as explained above. Jain only teaches opening communication between a slave and the master computer, without reference to any other slave computer. This claim also depends from allowable claim 1. The rejection of claim 4 is deemed to be overcome.

Regarding claim 10, this claim depends from claim 1, deemed to be allowable, so claim 10 is deemed to be allowable.

Regarding claim 11, regarding the definition of "industrial process event", a reasonable interpretation of the scope of this phrase does NOT include "television broadcasting" because television broadcasting is an industry. To prove that this reasoning is overbroad, just consider the advertising industry, or the legal industry, or the service industry, etc. In short, any economic activity can be called an "industry". Thus, this approach to defining "industry" is unacceptable and useless. A better approach is to use what one of average skill in the art of machine vision would define as "industry", since that is the general

field of the technology of Applicant's invention. In that sense, an "industrial process event" would be any event relating to manufacturing, processing, shipping, inspecting, measuring, etc. Clearly, the example presented by Jain, i.e., entertainment, sports, etc, is NOT an industrial process. The rejection of claim 11 is deemed to be overcome.

Regarding claim 13, this claim depends from claim 1, deemed to be allowable, so claim 13 is deemed to be allowable.

Regarding claim 14, Applicant has now claimed "the any second VP" in claim 1. Also, this claim depends from claim 1, deemed to be allowable, so claim 14 is deemed to be allowable.

Regarding claim 16, this claim depends from claim 1, deemed to be allowable, so claim 16 is deemed to be allowable.

Claim 19 has been cancelled.

Regarding claims 21-22. and 31-32, these claims depend from independent claims 20 and 30, deemed allowable for the same reasons that claim 1 is deemed to be allowable, so claims 21-22. and 31-32 are deemed to be allowable.

Regarding claims 26-29, there is nothing taught, suggested, or motivated to include a spreadsheet in the user interface of Jain. Spreadsheets are commonly used for business and accounting calculations. Thus, there is a predisposition NOT to include such an irrelevant interface for use in the "television industry". Spreadsheets are not typically viewed as entertaining, or helpful in any way to a TV viewer. Presently, there are NO applications of spreadsheets in the user interface for any TV device, such as TiVo, for example.

The advantage of using a spreadsheet for machine vision is evidenced from the commercial success of InSight ™, a product sold by Cognex Corporation, which features a spreadsheet user interface, as shown in Figs. 5-7, for example. It is clear from the Figures that the spreadsheet at least provides a readily understood and easily used user interface. The commercial success of InSight™ shows that there is a purpose, advantage, and superior basis for solving problems in the field of Machine Vision. The commercial success of InSight™ illustrates that the claimed spreadsheet offers MANY advantages over other machine vision systems. Accordingly, the rejection of claims 26-29 is deemed to be overcome.

The prior art made of record and not relied upon does not appear to present an impediment to the allowance of the present application.

Accordingly, Applicants assert that the present application is in condition for allowance, and such action is respectfully requested. The Examiner is invited to phone the undersigned attorney to further the prosecution of the present application.

Respectfully Submitted,

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